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5 depends on 6  
add a gear system

PATENT

Serial No. 10/554,228

Amendment in Reply to Office Action mailed on March 19, 2007

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An irradiation device ~~(1)~~, comprising:
- [[ - ]] a base part ~~(2)~~,
  - [[ - ]] a support ~~(3)~~, longitudinally extending from the base part ~~(2)~~ and enclosing ~~an~~ a first angle ~~( $\alpha$ )~~ with vertical axis ~~V~~, and
  - [[ - ]] a housing ~~(4)~~ comprising a central axis ~~(5)~~, at least one radiation unit ~~(6)~~, and a radiation emission plane ~~(7)~~, said housing ~~(4)~~ being pivotally connected to said support via a pivot axis ~~(8)~~ shaft,
  - [[ - ]] said housing ~~(4)~~ being pivotable between an operational position ~~(A)~~, in which the radiation emission plane ~~(7)~~ is horizontal ~~(X)~~, and a rest position ~~(B)~~, in which the radiation emission plane ~~(7)~~ is vertical ~~(Y)~~, and the central axis ~~(5)~~ of the

housing (4) encloses the first angle ( $\alpha$ ) with the vertical axis (V),

~~characterized in that wherein the pivot axis (8) shaft extends from the support so as to enclose an a second angle ( $\alpha/2$ ) with the horizontal plane (X) and with the vertical plane (Y) so that said housing is movable between the operational position and the rest position with a single rotation of the pivot shaft about a pivot axis extending through the pivot shaft.~~

2. (Currently Amended) ~~An~~ The irradiation device as claimed in claim 1, ~~characterized in that further comprising a blocking system (10) is provided for releasably blocking the housing (4) in its operational position (A) and in its rest position (B) relative to the support (3).~~

3. (Currently Amended) ~~An~~ The irradiation device as claimed in claim 2, ~~characterized in that wherein the blocking system (10) comprises:~~

[[ - ]] a cylindrical blocking element (11) with protrusions (12) which is provided coaxially with the pivot shaft (8) near an end of

the pivot shaft (8) in the vicinity of its connection to the support (3),

[[ - ]] a chamber (13) provided in the housing (4) for receiving said blocking element (11), comprising notches (22) for co-operation with said protrusions (12).

4. (Currently Amended) ~~An~~ The irradiation device as claimed in claim 1, ~~characterized in that~~ further comprising a connection system (30) is provided for connecting the pivot axis (8) to the support, ~~which~~ wherein the connection system comprises:

[[ - ]] a fastening element (31) for receiving the shaft (8), which is attachable to the support (3),

[[ - ]] a clamp element (32) for clamping the shaft (8) in said fastening element (31).

5. (Currently Amended) ~~An~~ The irradiation device as claimed in claim 1, ~~characterized in that~~ wherein the device (1) comprises a ~~suntanning~~ sun-tanning device.

6. (New) An irradiation device comprising:

a base;

a support longitudinally extending from the base; and

a housing comprising at least one radiation unit and a radiation emission plane; and

a shaft which pivotally connects the housing to the support; ~~and~~

the housing being pivotable between an operational position where the radiation emission plane is horizontal, and a rest position where the radiation emission plane is vertical;

wherein the housing is movable between the operational position and the rest position with a single rotation of the shaft about a pivot axis extending through the shaft; *and*

*a gear system provided at the connection point of the support to the housing*

7.(New) The irradiation device of claim 6, wherein the support encloses a first angle having a first value with a vertical axis, and wherein a central axis of the housing encloses a second angle having the first value with the vertical axis.

8.(New) The irradiation device of claim 6, wherein the support encloses a first angle having a first value with a vertical axis, and wherein the shaft extends from the support so as to

enclose a second angle having a second value with the horizontal plane and with the vertical plane, the second value being half the first value.

9. (New) The irradiation device of claim 6, further comprising:

a fastening element that receives the shaft and is attachable to the support; and

a clamp which clamps the shaft in the fastening element.

10. (New) The irradiation device of claim 6, further comprising a first gear having a first diameter  $D1$  and engaging a second gear having a second diameter  $D2$ , the second gear being rotatable about the shaft, wherein  $D1 = D2(90/\alpha)$ , where  $\alpha$  is an angle between the support and a vertical axis.

11. (New) An irradiation device comprising:

a base;

a support extending from the base; and

a housing comprising at least one radiation unit and having a

longitudinal axis; and

a shaft which pivotally connects the housing to the support;  
the housing being pivotable between a rest position where the longitudinal axis is substantially parallel to the support and an operational position where the longitudinal axis is not substantially parallel with the support;

wherein the housing is movable between the operational position and the rest position with a single rotation of the shaft about a pivot axis extending through the shaft.

12. (New) The irradiation device of claim 11, wherein the support encloses a first angle having a first value with a vertical axis, and wherein a central axis of the housing encloses a second angle having the first value with the vertical axis.

13. (New) The irradiation device of claim 11, wherein the support encloses a first angle having a first value with a vertical axis, and wherein the shaft extends from the support so as to enclose a second angle having a second value with the horizontal plane and with the vertical plane, the second value being half the

first value.

14. (New) The irradiation device of claim 11, further comprising:

a fastening element that receives the shaft and is attachable to the support; and

a clamp which clamps the shaft in the fastening element.

15. (New) The irradiation device of claim 11, further comprising a first gear having a first diameter  $D1$  and engaging a second gear having a second diameter  $D2$ , the second gear being rotatable about the shaft, wherein  $D1 = D2(90/\alpha)$ , where  $\alpha$  is an angle between the support and a vertical axis.